

BRUCE (H de.)
ON
CONSUMPTION
1858.

YALE
MEDICAL LIBRARY



HISTORICAL
LIBRARY

COLLECTION OF

Arnold P. Leeds

CONSUMPTION:

CURED AND PREVENTED,

BY

A NEW AND CERTAIN METHOD WITH MEDICAL
ASPIRATIONS, EASY OF APPLICATION AND WITH-
OUT ANY ANNOYANCE TO THE PATIENT.

WITH REMARKS ON NUMEROUS CURES.

BY DR. H. DE BRUC.

[Genève]

THIRD EDITION,

Translated from the French.

No Family should be without this concise, but valuable Work,

PRICE ONE SHILLING.

ENTERED AT STATIONERS' HALL.

To be had at Dr. H. DE BRUC's Wholesale House, 3, Coventry St.,
at Messrs. Mc. DOUGAL, & Co. Chemists, 174, Regent St., London:
and all Chemists and Booksellers, throughout the Kingdom.

1858.



Cent
AC 310.5
B79
1P58

ADVERTISEMENT.

The species of medication by inspirations with the aid of the apparatus of our invention, and the medicines that we have studied with a view to their absorption, by the respiratory organs, has been experimented by us during four years in succession ; and with so constant success, that we yield to the entreaties of the most honorable individuals in making summarily known the result of our studies, researches, and discoveries.

Medication by the respiratory organs is perfectly free from danger and procures real and lasting cures.

Before prejudging the matter, we request to be heard ; we know that there exists a certain prejudice against every new doctrine.— But it is however a sad reflection for mankind to see that the art of healing, instead of progressing, remains, as it were, stationary, and that most of the diseases deemed incurable at the time of Hippocrates, are still thought so.

Stepping out therefore of the beaten track of routine, we have endeavoured to discover curative means for most of the affections which have been hitherto above the reach of art, and are happy in being enabled to announce that our efforts have been crowned with success.

Our mode of treatment by medicamental inspirations does not exclude all the other means offered by science ; we present this new way of proceeding as one weapon more to contend against these formidable maladies which drive to despair both the patient and the physician.

We have but one wish, that of being truly useful ; we have consequently confined our statement within the narrowest possible limits, in order to spare the reader the length and dryness of perhaps a fatiguing perusal, to bring him on quickly to the conclusion.

I.

PRINCIPLE OF MEDICAMENTAL INSPIRATIONS.

We see every day, patients sent forth by the principal scientific men to breathe the air of the country, of our meadows, gardens woods and mountains, particularly in spring, when vegetation sheds its fragrance in profusion. Wherefore? To what purpose? Because flowery plants exhale a medicinal principle, exerting a beneficial influence over certain diseases, and debilitated constitutions.

What good do we not feel from the enlargement of our lungs saturated with those beneficial aromas! Do we not feel stronger, better, and more cheerful? There are few persons that have not experienced the effects of which we are speaking.

Our lungs indeed are a vast absorbing surface, the most active, unquestionably, of all the parts of our body. It is in the lungs that the venous blood, it is well known, impelled by the heart, by means of the pulmonary artery, undergoes there the influence of the air inhaled, and acquires new properties: it assumes a red of a brighter hue, a stronger odour, a greater degree of heat, it parts with a proportion of its serum.

When the blood in the pulmonary artery is examined, it is of a dark colour, black and serous: when seen in the pulmonary veins after undergoing the influence of respiration it is of a beautiful red, containing more fibrine, of a warmer temperature and highly oxygenated: a sudden chemical action, therefore, of the highest importance has taken place, and which serves to explain the mechanism of the sigh, the hiccup, gaping, breathlessness, cough, expectoration, laughter, and sobbing, etc., etc.

The subject which is now occupying us is no novelty.—It is *theoretically* well known to physicians, but nothing or next to nothing

has been done towards its application. It was necessary to reduce to practice the theory of medicated inspirations, to test its effects and render it popular: it was necessary to study and avail ourselves of the indications of nature, our *grand teacher*; to substitute for her open laboratory, an artificial one, and to arrive at making the active principle of plants, of minerals, etc., to pass with the air into the lungs, after acquiring the most exact knowledge of the affinity existing between the disease and the curative medicine to be employed.

Will the dose of medicine absorbed, with the aid of our small apparatus, be considerable enough to have a powerful curative effect?

Experience has shown us that in most cases the dose was always too strong, and that it was necessary rather to diminish than encrease it.

This fact will be understood by the following explanations:

All physiologists admit that absorption by the respiratory organs is so considerable and speedy that great numbers of diseases result from deleterious inspirations.

Is not, in fact, one instant sufficient to inoculate the germ of a disease into a healthy person?

Is not a momentary stay on a marshy soil sufficient to be sometimes attacked by an intermittent fever?

Are not those persons that have, but for a very short time, inhaled the emanations from lead, or some of its preparations, subject to cholic?

Is not every epidemic disease caused by the absorption of a miasma?

Are not headaches, cephalagies, produced by allowing certain flowers to remain in a bedroom?

Does not the inspiration of carbonic acid gas cause instant death?

If pernicious and frequently atomic, or even dynamical elements can be introduced into the respiratory organs, and by them absorbed with so great rapidity; if from the lungs as from a centre, a hurtful principle may be impelled by the blood into all our organs to produce therein the speediest, the most varied, and often the gravest disorders, we can readily admit that the same reasoning may apply to salutary principles, or elements, from aromas, from medicines volatilized according to our method, and studied as specifics of the diseases to be treated through the respiratory organs.

In fact do we not see a fainting fit cured by only one inspiration of spirit of sal volatile, or even of aromatic vinegar?

Are there not aromas, such as that of coffee, that drive away certain headaches?

Do not the inspirations of ether allay a slight nervous fit?

Does not chloroform act upon all our organs in a sudden manner by inspirations?

Do not the inspirations of stramonium cure nervous fits of asthma?

Do not spirituous inspirations intoxicate, and narcotic ones produce sleep, etc., etc.?

These truths are of great importance with regard to the treatment of which I am, if not the inventor in every sense of the word, at least, the propagator in a practical point of view; consequently physicians of great merit and those of medicinal Academies have already sanctioned this new medical doctrine and acknowledged that treatments by inspirations are some of the most active and speedy in their results. The medicated agent volatilized and inhaled immediately reaches the mass of blood by which it is conveyed afterwards to every part of the body. Immediately after the first inspiration, the blood is modified by the medicament. If this medicament is well selected and adapted to the disease conformably to our instructions, acting in a continual manner on the organism, the cure is effected without pain and danger.

II.

ON THE PRINCIPAL CAUSES OF THE DISEASES OF THE CHEST.

PHYSICAL CONSTITUTION.

There are some persons that are so predisposed to consumption that a slight cause, such as a mild catarrh, excites its development, whilst others in whom the predisposition does not exist, do not become consumptive even after causes apparently very serious, such as pneumonia, pleurisies, wounds, &c. Among the former, there are some in whom the predisposition is so decided that their whole lives are nothing but a continual struggle against the tendency of consumption, which everything, conspires to bring on this disease in them, and which they, with much difficulty escape. This predisposition is generally seen in the physical constitution of the individual.

This constitution may be either innate and caused by hereditary transmission, or developed under the control of certain circumstances in youth, or in a more advanced age, and may consequently be acquired. It is however more frequently innate and caused by hereditary transmission.

The characteristics of this constitution are sufficiently apparent, and manifest themselves during the first ten years of life, but still more from the 16th to the 30th year.

Those children having a swollen, bloated, and polished face, large nose and lips, the colour of the skin dirty and dull, or white as wax, having high coloured cheeks on a white ground, the rosy tint

of which is quickly succeeded by paleness at the least disagreeable impression, having the veins of the skin and neck very prominent and strongly marked on the white ground of the skin, a large belly, slender limbs, who are thin notwithstanding this swelling of the face and belly, or their healthy appearance, who are subject to frequent bleeding of the nose from the slightest cause, that are frequently attacked by catarrhs, sore throats, having swollen glands, particularly at the neck, that grow much and rapidly, these children cause more fear than others, that at the age of puberty they will fall victims to consumption, particularly if the tendency to this disease be not carefully checked.

After puberty the characteristics of this constitution are still more apparent, and can hardly be mistaken. They are the following:—The form of the body is visibly delicate and weak, the growth has been rapid and has exceeded its strength, the waist is long, thin, and narrow, the limbs are thin and long, the muscles of the extremities, particularly of the superior, are lax, the chest is narrow, close, and protuberant, and called chicken-breasted, or sunk in and flat, the shoulder blades are protuberant and deviate, backwards in the form of wings, the back is rather crooked from the rounding of the shoulders, the clavicles are protuberant, the skin is white, soft and tender, or fine and delicate, the cheek bones are often coloured with a bright purplish red, and the least excitement causes this colouring to become more intense. With a chest, thin and narrow, or sunken and flat, respiration is habitually embarrassed, the breath is short, breathlessness and perspiration quickly appear, particularly when persons of such a physical constitution perform any manual labour, when they go up stairs, or wish to ascend mountains, it is besides impossible for them to make deep aspiration and keep in their breath a long time. Transient pains in the chest, back, and shoulders, restlessness, with puffs of heat in the face, and spontaneous weariness are often to be remarked.

Such is the ensemble of the phenomena to which the name of consumptive constitution has been given. But it must not be

believed however that all these phenomena are often met with in the same individual ; they combine one with another in various ways, so that some are wanting where others exist. *The most frequent of all is the little developement of the chest.*

HEREDITARY TRANSMISSION.

It is well known in the world that children often inherit the constitution, the outward form, the muscular force, the moral and intellectual dispositions of those who give them birth. In the same manner, that those hereditary transmissions which strike every beholder, parents often transmit to their children, the form, the disposition, the strength or weakness, the irritability and sensibility of their internal organs, as well as a tendency to contract certain diseases, by which they are, or have been attacked, or to which they are themselves predisposed, whether they bear in themselves the hidden germ, whether there be in them only an imminent tendency to contract them, or whether they be subjected to those causes that may produce those disorders.

Of all the diseases that are transmitted in this manner, there are perhaps none to which this transmission applies more truly than pulmonary consumption. It is attached to a general, deep, and radical modification of the constitution, and particularly to a special state of the ærial apparatus. This modification often exists long before the disease breaks out, but there is a continual tendency to contract it. In spite of this tendency the individual may long enjoy, at least apparently, perfect health, until an exciting cause, a chill caught at a ball, or a simple catarrh brings on the beginning of consumption.

TEMPERAMENT.

A lymphatic temperament and a scrofulous tendency, particularly predispose to pulmonary consumption. The influence of this latter predisposition on the production of tubercles in the lungs, is so

decided, that many authors have stated, that this consumption is only a variety and a *localisation* of scrofula in the lungs. I am completely of that opinion. In fact, it has been observed, that those persons that have had scrofula in their childhood, are very liable to become consumptive when grown up, and that they are still more so, during the continuation of the primitive disease. It must not however, be thence concluded, that all children with lymphatic temperaments, or scrofulous, will become consumptive ; that consumption attacks only those who have this temperament, but it contributes in a very high degree, to the developement of this disease, where there is a decided predisposition in the frame of the thorax. In Russia, for instance, the different forms of this disease, are very common, whilst consumption is relatively rare enough there. At St. Petersburg as at Stockholm, on 1000 deaths, it has been ascertained, that 60 or 70 were caused by consumption, whilst in the south of France, nearly a fourth part of the population died of it ; though the scrofula in these countries is less frequent than in the North. In these severe climates, the inhabitants breathe during a very great part of the year, a very dry and excessively cold air ; when it has reached the lungs, it assumes in a short time the heat of the body, and is consequently dilated, which powerfully contributes to the developement of the chest of children, in those regions. In the South on the contrary, the respiration reaches its minimum during the long summer heats ; the air inhaled, is of a temperature nearly equal to that of the blood, and it is impossible that it should dilate in a sensible manner the vesicles of the lungs, and favour the developement of the chest. The generally mild and damp winter of the South, in no way counteracts these conditions, unfavorable to the formation of a wide chest.

But in another way, it favors the developement of consumption, because in consequence of the very imperfect means of warming themselves, the inhabitants during that season, find themselves in nearly the same condition as those, who from a temperate or hot

climate, pass into a colder country, which exceedingly favors the tuberculisation of the lungs.

The population of the South, are generally less stoutly formed, less broad shouldered, and of a more delicate frame, than those of the North; and we may conclude from the facts just stated, that a lymphatic temperament, and a scrofulous tendency are particularly dangerous as a consumptive predisposition to debilitated constitutions.

EXCITING CAUSES.

In those persons that have a decided predisposition to consumption, a very slight cause is sometimes sufficient to bring on a disease of the chest. These causes are very numerous, and I am obliged to confine myself to bring them simply before the reader, for it is impossible to pass each of them in review, and to indicate their manner of acting on our body in a pamphlet of a few pages.

Exciting causes, generally bring on some disorder, and preferably that to which the person is predisposed. Thus a simple chill will be the cause of rheumatism in one person, of ophthalmia in another, and of catarrh in a third and the beginning of a disease in the chest, in one who is predisposed to it.

Among the causes which act primitively on all the organisation, and secondarily on the lungs, must be mentioned—painful moral affections, a defective alimentation, insufficient clothing, uncleanness, want of exercise, or work beyond the strength of the individual; a too rapid growth, loss of fluids, a too long protracted lactation, hemorrhages, and many diseases such as typhus, &c.

The following causes act primitively on the whole economy, and lungs at the same time. They are—want of light, air not sufficiently renewed, air vitiated by emanations, a too sudden change of temperature, particularly a transition from heat to cold; a very damp atmosphere, the transition from a mild, to a cold climate;

and various diseases, such as catarrhs, hooping cough, pleurisy, pneumonia, &c.

Other exciting causes act primitively and directly on the lungs, such as gaseous and vapourous bodies mixed with the air, emanations or metallic vapours, dust, and perhaps the habit of playing on wind instruments.

III.

ON THE NATURE AND PROGRESS OF TUBERCULAR CONSUMPTION.

The state of the lungs from the beginning of the disease of the chest, is characterised by small bodies primitively transparent, grey, even sometimes diaphanous, or nearly colourless, of variable bigness, from millet to that of hemp seed, or by small corpuscles of a yellowish and opaque white, rounded, friable, and of a density analogous to that of the finest cheeses. These small bodies, without a trace of organization or texture, are either disseminated or united into more or less considerable masses, or intimately combined with pulmonary parenchyma in a state of infiltration, and occupy only one or several parts of the lungs, or even a whole lung. Sometimes a certain number of these bodies, called tuberculæ, happen to unite to constitute a tubercular agglomerated mass that may reach the size of a walnut, or even that of an egg. Their number is very variable, and they are generally fixed on the summit of the lungs.

According to several authors, they are solid from their formation; according to others, they are first liquid, but quickly become solid.

In this state the tuberculæ constitute the first period of consumption.

These bodies get soft after a variable time ; turn into a soft matter, oily, and like soft cheese, then at last into a sort of creamy pus.

This transformation constitutes the second period of the disease of the chest.

The liquified tubercular matter forms abscesses in the pulmonary texture which break through the bronchia, are evacuated by expectoration, and there remain in their stead vacuums, excavations, or ulcers, the extent of which is in proportion to the softened tubercular mass.

The formation of these ulcers in the lungs constitutes the third period of the disease.

These cavities, sometimes multiple, isolated, and of small extent ; at other times less numerous, isolated, or communicating together ; sometimes unite at length to form a single cavity, more or less considerable.

This series of quite material modifications direct the progress of the disease, and determine its phases. These cavities sometimes become larger by the changing of the tubercles, and of the pulmonary substance which constitutes their edge or sides into matter, and at last they generally cicatrize after a certain time. I shall state further on in what manner nature operates in forming the cicatrization.

Tubercular secretions in the lungs succeed each other more or less rapidly, according to the progress of the disease. In acute consumption, for instance, they arrive one after another, and a large part of the lungs is shortly congested, whilst in the chronic form, these deposits are formed only at several months' intervals. In these cases, the tubercles are pretty often agglomerated around a sort of nucleuses, and form, as they soften, abscesses of a certain extent, always containing a smaller or larger quantity of purulent liquid, which the current of air of a bronchi crossing during respi-

These agglomerated tubercles, as they become soft, generally bring on a more or less sensible aggravation of the ordinary symptoms of the disease, the cough and oppression increase, until a purulent and copious expectoration reveals to the physician and patient, that an abscess has just burst to the great relief of the latter.

Then the date of the fresh cavity is known, and if one regularly auscultates, one may be convinced that it secretes less by degrees, that the gargling and cavernous respiration becomes less distinct, and ends by completely disappearing when it is cicatrized. The patient finds himself relatively pretty well, he coughs little, is not much oppressed, and if this improvement lasts some time, he recovers his strength.

But after a certain time a fresh abscess and cavity is formed, and if the place of the first have been carefully noted, by drawing a line around the stethoscope with nitrate of silver, one will be convinced that this second cavity is not precisely in the same spot as the last, but yet it is not very far from it.

At the post mortem examination of persons who died of consumption, the course of which was not too rapid, one generally finds in the lungs crude tubercles not yet softened others that have already undergone this transformation, abscesses ready to burst, ulcers more or less recent, and cicatrices as a proof that some of the latter had already closed.

These facts sufficiently prove that consumption is not so highly pernicious, because ulcers once formed do not cicatrize any more, as it is generally believed; *but because fresh tubercles, producing fresh abscesses, in proportion as the old ones disappear, are constantly formed.*

This is how ulcers in the lungs, are generally cicatrized; the sides of the cavity are again covered with a cellulo the vascular membrane, which is completely organized, or becomes semi-cartilaginous, and separates the sides of the ulcer, from

pulmonary substance. The cavity communicates, with one, of several bronchia, through which the matter, secreted inwardly, may be freely evacuated. If the work of nature stops there, there follows the formation of a sort of internal cicatrix, analagous to fistulæ, and the existence of which, is of no great inconvenience to health. Most frequently, the work of cicatrizing continues, and the cellulose vascular or semi-cartilaginous membrane is again covered with fresh fibrous plates, which finish by entirely obliterating the cavity.

It is probable that by a labour of re-absorption, nature sometimes contrives to make tubercular deposits entirely disappear, without their getting soft, or forming into abscesses, and without becoming cretacious.

In proportion as congestion in the lungs encreases, and suppuration settles there, *the pectoral sides sink down, the chest becomes narrower and hollow, the respiratory motion becomes less*, so that if the finger is applied to the chest of such a patient, one no longer feels that it rises and expands during aspiration, as in a state of health. This fact appears to me very serious, because it proves that the constitutional predisposition, which principally consists in a narrow and flattened chest, encreases with the disease.

IV.

ON THE TREATMENT OF CONSUMPTION.

PROPHYLACTIC OR PRESERVATIVE TREATMENT.

The disease I have just described is so difficult to cure, that many authors have doubted of its curableness; they have even denied the possibility of its being cured, and it must be confessed that the most various medical treatments, hitherto employed to oppose its ravages, have produced but negative results.

In setting out from the principle, that tubercles in the lungs are but a particular form of the scrofulous tendency, the use of those medicines fit to combat this predisposition has been recommended; such is iodide of potassium, carbonate of potash, and that of lime, chloride of barium, digitalis, and particularly cods liver oil. The patients are directed to observe a mild but strengthening diet, chiefly fresh milk, to children; to adults roast meats, vegetables of easy digestion, and which cause no acidities in the digestive organs, the moderate use of generous wines, a protracted stay in the country during the fine season is recommended; gymnastics, in a word, all that may contribute to the strengthening of the organism, and favour the formation of a rich blood.

But this treatment does not suffice to prevent those persons, whose predisposition is very decided, from a disease of the chest; it is necessary in these cases, to endeavour to favour as much as possible the development of the respiratory organs, particularly when the chest is narrow and of small convexity. I realize that indication, by making those persons subjected to this pyropholactic treatment, once or twice a day, and from 20 to 30 minutes each time, perform aspirations as deep as possible, which must be followed by a very slow and very complete aspiration. During these aspirations, the patient must have my respirator on the mouth, with the tubes of the respirator impregnated at the morning with the volatile medicament, marked "Aspiration, No. 1," and at night with the No. 2. All these exercises are to be continued very regularly, very methodically, and during a long time, and their use is often insufficient to form a chest, such as the proportions of the person's stature require, that it may be sufficiently broad.

I have discovered another means to obtain the enlargement of the chest, in the space of a few weeks; it is by a new employment of galvanism. I will explain the theory of this discovery.

Ordinary galvanism, such as hitherto practised, consists in fixing

to the two poles of the current of induction, sponges imbibed with salt or acidulated water, and in *applying them directly* to the parts of the body, the muscles of which are to be contracted; whereas after my new method the galvanism is applied *indirectly*, developing thus in the part of the body, submitted to the action of the electricity, an inductive current of specific effect, and of the third order.

To obtain all that could be desired, it was necessary to make numerous experiments, and construct an *especial machine* to produce these *all-important* results. The details of which would be too complicated to explain here, or to enable the patient to operate upon himself. But the marvellous success, that has attended my treatment on the continent, in more than *five hundred* cases, has been so manifest, that I, with the greatest confidence of cure, delay not the publishing of my method in England, and have instructed personally a gentleman already well acquainted with the science of galvanism, in applying galvanic electricity after my own process, and who is consequently perfectly capable of carrying out the treatment during my absence.

I have established my principal depot, for my medical respirators in London, at my own house 3, Coventry Street, Haymarket, where the galvanic applications are carried on for consumptive constitutions, and where every information can be obtained. The respirators can be obtained also at Messrs. Mc. DOUGAL & Co, 174, Regent Street, London; and all respectable Chemists.

The contractions therefore, that are obtained by my method of galvanizing, are of a nature quite different, from those resulting from the ordinary method.

Here is in what this difference consists:—Our muscles possess two very distinct properties *irritability* and *tonicity*. The former gives to the fleshy fibre, the faculty of becoming shorter, by oscillating and contracting on the occasion of certain external excitations, such as the contact with the current of induction, or under

the influence of our will. But as soon as the excitation ceases, *the contraction of the muscle disappears, and the latter resumes its tranquillity.*

In certain diseases, particularly in paralysis, this irritability is much weakened, or nearly entirely lost, and it is in these cases that *direct galvanization* is used with the greatest success.

Tonicity on the contrary, is a continual tendency which the muscles have to become contracted, which *Bichat* has called, contractibility of the texture, and which the *brothers Weber* simply call elasticity. This tonicity gives to our body its bearing and vigour. It considerably diminishes in old age, and that is the reason the flesh is so flabby in old people. It also decreases in serious disorders, and it is this diminution of the tonicity of the body, that principally constitutes the great weakness of persons in a state of convalescence, nervous weakness, or, as it is vulgarly said, having weak nerves, is nothing else, in most cases, than the want of energy in the muscular tonicity of the individual.

It is to this tonicity and not to irritability that our method of galvanism applies, which gives it quite a fresh energy, and excites local contractions which are less energetic and less tetanic it is true, than those resulting from the excitation of irritability, but which possess the immense advantage of being kept during 8, 12, 18, and sometimes 24 hours.

By daily repeating the galvanism by my process during four weeks, a real and durable enlargement of the chest is obtained, an enlargement which varies according to the stature of the persons, from four to six inches of increase of that part of the body. On persons of small stature from three to four are obtained, on middle sized individuals from four to five and from six to eight inches on the tallest.

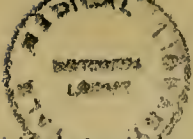
Physiology furnishes sufficiently exact data to be able to appreciate the immense effects which such an enlargement of the thorax must produce over all our economy.

Valentin, the celebrated physiologist, has made many researches to determine the proportions existing between the circumference of the thorax without the armpits, and the volume of air inhaled at each respiration.

These proportions vary considerably in different individuals; it may however be admitted, from the tables of this learned physiologist, that with an encrease of three inches of the circumference of the thorax, even in persons of small stature, the volume of air exhaled at each respiration encreases at least twenty-five per cent. When a person whose chest measures but thirty inches receives about 150 cubic inches of air at each respiration. Admitting an average of seventeen respirations a minute, 3,684,000 cubic inches of air to have been respired in twenty-four hours.

A person with a chest of thirty-three inches circumference absorbs at every respiration at least 180 inches cubes, or 4,406,400 inches cubes in twenty-four hours, say the person measuring thirty-three inches takes into its lungs 722,400 inches cubes of air more than the person measuring thirty inches.

Respiration is one of the most important functions of animal life. The blood in flowing through the capillary net-work of the different organs of the body, by bringing them the nutritious substance for the maintenance of life and of the functions of each of them, absorbs at the same time carbonic gas which renders it venous and unfit for the support of life. It is in the lungs and by perspiration that it exhales this carbonic gas by absorbing at the same time an equal quantity of oxygen, and that, by this exchange of gas, it becomes arterial, and fit to maintain all the functions of our organism. The blood may be, according to the constitution more or less arterial; in a sanguine temperament, for instance, it is more so than in a lymphatic temperament, it is also more so in a stout, robust young man, who works hard, and from the exertions he is obliged to make, respire deeply, than in a chlorotic person, or in those who lead a sedentary life; it is less so in those scrofulous



individuals than in those who enjoy sound and perfect health; and in this point of view the enlargement of the chest becomes very important to those threatened with consumption.

It is likewise by the absorption of oxygen as well as in respiration that the chyle extracted by digestion from the aliments is transformed into blood. But their transformation may be more or less perfect according to the nature of the chyle, and according to a more or less sound respiration. The more imperfect respiration is, the more the chyle in being transformed into blood will remain albuminous, the more lymphatic and the less abundant in fibrine the latter will be in this point of view the medicamentals aspirations are an inestimable blessing.

The lung is developed in proportion as the enlargement of the thorax allows it; and if at every respiration it can aspire a quarter more air, it necessarily follows that the ærial cells, have been enlarged in the same proportion, that is to say, that the surface over which the absorption of the oxygen is made and over which the carbonic acid gas is expelled has considerably augmented, which greatly facilitates respiration and considerably diminishes oppression.

By this same enlargement of the respiratory apparatus, the pulmonary capillary network being able to develop itself more freely, one of the principal causes of sanguineous congestions in the lungs is removed, congestions which always precede the spitting of blood, and the tubercular congestions which almost inevitably follow.

By my system of enlargement of the chest, and my medicinal aspirations all the pulmonary vesicles are enlarged, and this is a circumstance which has likewise its importance, because it is acknowledged by all authors, that the lungs are so much the less disposed to receive tubercular deposits, that their ærial vesicles are larger, and many authors have pretended that with the

emphysema of the lungs, a disease justly characterized by an inordinate enlargement of these vesicles, *Consumption is impossible.*

As it has just been seen, the artificial enlargement of the thorax, obtained by the tonic contraction of the muscles, combined with my system of medicamental aspirations fulfils every physiologic and pathological condition to correct perfectly the constitutional and physical predisposition to contract the disease of the chest.

V.

CURATIVE TREATMENT OF CONFIRMED CONSUMPTION.

I stated above, in endeavouring to sketch the progress of consumption, that tubercular deposits are periodically renewed in the lungs; that generally old ulcers become easily cicatrized and do not form permanent ulcers; but that fresh ones are always forming by the softening of fresh tubercles. From these facts one may naturally conclude that if one had the means of preventing these periodical tubercular deposits from forming, one might easily enough succeed, in curing the disease of the chest. I have discovered this means in the medicamental aspirations by the aid of the respirator of my own invention. In the preceding article I have proved that the enlargement of the chest fulfils all conditions whether physiological or pathological, combined with my medicamental aspirations, prevent tubercular deposits in persons that are not yet predisposed to them, and there is no reason existing why the same virtue should not be attributed to it in persons already consumptive.

The enlargement of the chest and the medicamental aspirations are not only the best preservatives, they are at the same time the only means that can cause the re-absorption of tubercular congestions. Science has not hitherto admitted this re-absorption as a means of cure put into action by nature, but I am nevertheless con-

vinced that in numbers of cases observed by me it has taken place. There is however nothing very astonishing in admitting such a re-absorption since we frequently see scrofulous tumours of various glands of the body being re-absorbed with the aid of a proper treatment. There is not therefore any organ endowed with so powerful a re-absorption as the lungs, for in pneumony, for instance, hepatisation extends itself frequently over a very great surface, and is however re-absorbed in a few days, and the respiratory apparatus becomes as permeable as it was previous to the disease.

Here is an observation proving in a direct manner this re-absorption of tubercular deposits. Mr. Armand, watch-maker, living at Chenes, near Geneva, came to consult me during the month of last February. He had oppression in walking, a dry and pretty frequent cough, particularly in the morning, his complexion had assumed a leady colour testifying how far his organism was threatened, he had become considerably thinner, and his mother, as he told me, being consumptive, he feared he might be so likewise. On examining his chest which was but little developed, I found that the sub-clavicular region of the right side was much less convex, that the respiratory motions were visibly smaller than on the opposite side. On percussing this region gave out a deadlier sound, and auscultation confirmed the fears of the patient, his respiration was less intense and the motion of expiration was attended with a bronchic respiratory noise which is often heard in the commencement of consumption. These symptoms together with the absence of all mucous rattle, left hardly any doubt about the nature of the affection; Mr. Armand, had crude tubercles on the point of the right lung, he was in the first stage of the pulmonary disease.

On the 2nd of March he began his treatment on the enlargement of the thorax and medicamentous aspirations. From the first days he had tonic contractions that lasted twenty hours, and great thanks to the great excitability of his muscular system, he rapidly got better. After a treatment of three weeks his thorax was well developed, and sufficiently convex for his size, the subclavicular region of

the right side was perfectly raised, on percussion it gave out a sonorous sound, and by auriculation, one might be convinced that in the spot which had been the seat of a tubercular congestion, respiration had assumed its normal state. His chest had become more fleshy, his muscles more visibly developed, he no longer coughed, nor had he the least oppression. His complexion which had been of a grey leady colour, had changed to that of perfect health. Mr. Armand, might be considered as completely cured. During this treatment he took no medicine inwardly, and this remarkable result must be solely attributed to galvanism, and the medicamentals aspirations.

The patient coughed rather frequently, before and in the beginning of his treatment, but he always assured me in the most positive manner, that he did not expectorate, and having no mucous rattle, there is no reason to suspect the correctness of his assertion. But this total absence of secretion in the lungs and bronchia, justly prove that the disappearance of the tubucular congestion is owing only to re-absorption. The observations which I have had the opportunity of collecting, give the proof of that affirmation. Many patients experience by the aspirations a mild and pleasant heat within their chest. It seems to them that they are soothed by it, respiration becomes at the same time much freer. It happens in these cases, when there are intenerated tubercles and ulcers in the lungs, when the secretion of the latter and that of the bronchia is very clammy and that it produces mucous rattles in the chest, that the latter disappear or considerably diminish, as soon as the warmth is felt in the chest.

It may well be allowed to conclude from these observations, that the aspirations produce a vivifying action, which the patients experience in the cases cited, under the form of a mild warmth, by a soothing action that diminishes the cough, and facilitates expectoration; by a sort of invigoration of the pulmonary texture, which cannot fail to favour the re-absorption of the tubercles, and that

gives to the respiratory organ, a greater power of resisting the attempts of the disease in making fresh attacks.

The aspirations diminishes secretion, while it renders expectoration easy to the patient, it favours cicatrization without the constitution tending to become weaker.

Here are upon the whole, the effect produced by my treatment :

1st.—The galvanisation by my process, excites in the muscles of the chest, tonic contractions, by which one contrives by degrees to raise the ribs and to enlarge the thorax, in a desirable manner.

2nd.—The medical aspirations soothes oppression in patients that suffer from it, by a sedative and tonic action on the pneumogastric nerve.

3rd.—The medical aspirations acts as far as the depth of the pulmonary texture ; and invigorates the fibres, and at the same time assists expectoration.

4th.—They give the lungs a greater power of resisting the invasion of fresh tubercular deposits.

5th.—They act like astringents by diminishing the too profuse purulent secretion, and cicatrization of pulmonary ulcers.

6th.—They contribute to soothe the too great mobility and excitability of the nervous system.

7th.—They invigorate the whole body nearly in the same manner, but in a higher degree than it could be done by the most tonic medicines.

8th.—At last they act like specifics.

But I have a few words to say on prognosis, the pulmonary disease had hitherto been in so bad repute, that telling an individual he was consumptive was tantamount to a sentence of death, and for that reason it was tacitly agreed between the public and physicians

never to tell a person affected with consumption that he was consumptive ; it was called a bad cold, a bad catarrh, &c.

It is no longer so since my discovery, it may now be affirmed, without fear of deception, that consumption in its first stage, and generally ever in the second, is ever curable ; that the tubercles are made to disappear, some by suppuration, others by re-absorption and to give back to the surface of the lungs all its normal permeability.

Prognosis is less favourable when consumption has reached its third and last stage, the tubercles are more numerous, and occupy a large part of the lungs ; there are generally existing in it, ulcers, covered with thick and semi-cartilaginous membranes ; its surface is covered with old cicatrices, and much more time is required to obtain it, than in the first two stages of the disease : it is however often obtained.

In this stage, the patients have generally a more or less intense hectic fever ; it is often attended with nocturnal perspirations, which exhaust and fatigue them, or else they are attacked by an obstinate diarrhœa, particularly when the tubercular becoming more and more intense, deposits likewise its morbid products on the membranes of the intestine.

I have not hitherto, succeeded in discovering a differential diagnostic between the hectic fever which yields to the treatment, and that which resists all remedies ; but I think I can account why, in these latter cases, medicine so completely fails.

The lungs do not only absorb atmospheric oxygen, but likewise nearly all the gases and vapours mixed with the air we breathe. It is upon this truth that my treatment by aspirations is combined, and etherization presents a striking instance of it known to every one. Ether or absorbed chloroform modifies the blood, and it is this altered blood which exerts the anæsthetic action on the nervous centres.

Tubercular ulcers having their seat mostly in the upper part of the lungs, it is evident that at the moment of aspiration the atmospheric air is more or less charged with puriform particles, and patients consequently breathe an ever impure air. In some countries, particularly in the South, it is thought that the air exhaled by consumptive individuals is charged with a contagious miasma, which causes in its turn consumption in the healthiest and strongest persons: in the North, they do not generally believe in this sort of contagion, but it is nevertheless evident that for the patient himself this affected air in his own lungs must exert an action injurious to his constitution.

The consequences of the absorption or rather of reabsorption of purulent matter by large sores, are well known and much dreaded in surgery. As soon as this reabsorption of pus has taken place in a patient, a very violent and dangerous fever breaks out, resembling hectic fever, by the shiverings that precede by a strong heat with a very dry skin, which yields at last to a copious perspiration; and these fits of fever are likewise periodical, as hectic fever.

Prognostic may then be resumed in the following manner:—A consumptive predisposition is very curable by the enlargement of the chest, and by the use of my medicamental aspirations.

Confirmed consumption is likewise very curable in the first stage of that disease, but it becomes less and less so, as it draws near to the third and last stage.

In this last stage, the prognostic vary according to the greater or lesser extent of the tubercular congestions, the number of larger or smaller ulcers in the lungs, in a word, the greater or lesser impermeability of the organ, and the violence, as well as, the nature of the hectic fever. If the tubercular deposits are but of limited extent, if they have not rendered the pulmonary surface completely impermeable, if the organ is not too much lacerated by ulcers, if the hectic fever is only the result of the exhaustion of the body by

too great a loss of substance and not of pernicious infection, a cure may still be hoped for, which requires only a little more time than in the commencement of the disease; and we feel amazed at seeing health returning, to where it was thought death had already established its empire.

OBSERVATIONS ON CURES.

REMARK FIRST.

Mr. Robert, 19 years of age, came, during the month of May, 1854, to consult me, having been long since attacked by a pulmonary consumption in an already advanced state. He was of a tall thin stature, his limbs slim, his chest narrow and sunk in, the real type of a consumptive constitution.

Mr. Robert was very scrofulous in childhood, he was big bellied and suffered since several years from chronic diarrhæa. At the age of puberty, he often had catarrhs, and this circumstance has prevented the commencement of his disease from being precisely known. This outward appearance, already announced a very much advanced consumption, he was very thin and weak, his back was rather crooked, his cheek bones were highly coloured, and he was short breathed. On examination I found his pulse to beat 120 a minute, and he told me that he perspired every night, and had the diarrhæa; his hands were burning, he had in short, a very decided hectic fever.

The circumference of his chest did not exceed 25 inches, and the sub-clavicular region of the right side, was visibly more depressed than that on the opposite side. Percussion gave out a deadlier sound on the right, than on the left, and at the auscultation were heard on the point of the right, humid rattles and the gurgling of a cavity, which however did not however appear to be of large extent.

Mr. Robert coughed and expectorated puriform matters.

I began the treatment on the 1st. of June, 1854, by the galvanisation and the aspirations, which my young patient followed very regularly, with a success that I never should have ventured to hope, his respiration immediately became more free, more profound, and slow.

After a few week's treatment, the fever had considerably diminished, there were but 100 pulsations a minute, the nocturnal perspiration had ceased.

After a fortnight the pulse had come down to 90, the diarrhæa had ceased, his cough, as well as the expectoration had much diminished, the patient had resumed his strength. At the end of the fourth week, the fever had entirely disappeared, the patient neither coughed nor spat, and the auscultation no longer gave out those humid rattles, nor gurgling.

I might consider my patient as cured, but I resolved *nevertheless* to continue the aspirations a fortnight longer, hoping better to protect Mr. Robert, from fresh tubercular deposits. On the 15th July, I again measured his chest, which had reached a circumference of 28 inches.

REMARK SECOND.

Miss B——, of Lyons, now strong and well formed, presenting the characteristics of a lymphatic, sanguineous temperament, fair, blue-eyed, of a ruddy complexion, was born in 1836, of a robust father, and scrofulous mother who died of pulmonary consumption at the age of twenty-six. This young girl came into the world with every sign of health. At seven years of age, symptoms of scrofulous diathesis broke out: excessive thinness, big-bellied, relaxation, swelling of the ganglions around the neck and groin, difficulty of breathing, fever attended with perspiration.

Her father having written to me. I prescribed a treatment; the young girl was cured and enjoyed excellent health till the age of fifteen; at this period, that health which her father considered as re-established began to get out of order. Miss B—— suffered headaches, flushes of heat that rose to her face, particularly after meals; a cold came on to render her state more complicated; her cold having been nearly cured, there remained a dry cough in the morning attended with difficulty of breathing and slight palpitations. This state lasted about a year; during the following winter she quite lost her plumpness and the glands of her neck were slightly congested. She had a continual cough, with a pricking in the larynx and sternum. Copious spitting mixed with ruby blood; in the evening, palpitation and fever; agitated sleep, no appetite. Her father, who had seen the illness of his wife who had died of consumption turn out in this way, was terrified. Two treatments had already been tried without success; and when the distressed father consulted his habitual physician on the dangerous situation of his daughter, the latter would reply by one of those motions of the head which meant to say: "It is her mother's illness, it is hereditary, there is no hope." I was then at 900 miles from Lyons; the father wrote to me that if I did not come to his assistance he should be childless in a few months. His entreaties were so pressing that I decided to start for Lyons. I felt deeply interested to see this young lady again whom I had cured by correspondence, and as I had already made several successful trials of my treatment by inspirations I was in hopes to succeed equally in her case. Being near the patient, after an attentive examination, I ascertained the following signs: a dead sound in the region of the sternum, chiefly in the middle, and obtusion under the clavicle, particularly on the left; a mucous rattle was heard by auscultation under the sternum with a harsh, hissing respiration and a slight crepitation on the summit of both lungs and more particularly in the left axil. Pain in the region of the sternum, and towards the bifurcation of the

bronchia. I had the patient conveyed into a room facing the south and very dry, then immediately began the treatment by medicinal inspirations according to my method, which was then, as it were, but in a state of infancy; I prescribed a strict regimen.

Numerous patient hearing of my arrival at Lyons and having sent for me, I stayed there three months; I therefore had time to attend my young patient assiduously.

After three weeks' treatment by galvanisation and inspirations, the fits of coughing, which would wake the patient four or five times a night had ceased. The spitting was not sanguineous. The dyspnœa, palpitations, and fever, had considerably diminished the right lung was free. In the left lung, as well as in the region of the sternum the sound was clearer, and the pulmonary blowing easier; her appetite had become extreme; the first words she addressed to me at each of my visits were "I am starving." Her thinness of body however was not already so great; I prescribed a regimen a little more substantial, fecula with milk in the morning; at noon, jelly, broth, roast chicken, a little old Bordeaux wine with much water; in the evening, pap of potatoe, fecula or tapioka continual medicinal inspirations. After the lapse of a month the menses were regular. Three months later the cough, dyspnœa, palpitations, the congestions of the lymphatic ganglions, the fever, every symptom had entirely disappeared: she picked up flesh, her sleep returned, the cure was radical.

Miss B—— got married twelve months afterwards, and is now the mother of one child, her health is quite sound.

We are deeply convinced, that if this young lady had not been treated according to my method and principles, she perhaps would have died of mesenteric consumption in her childhood, or of pulmonary consumption in her adolescence. Her life was thus saved by my mode of treatment. We have treated hundreds of patients for nearly similar cases, and with constant success.

REMARK THIRD.

In the month of March, 1853, I was called to attend a young woman of 22 years of age, who, I was told was dying of her mother's disorder, pulmonary consumption.

In her youth this young girl had been big-bellied, had glandular tumefactions at her neck, a scurfy head, and had been subject to colds all her life. I then had again to do, as in most cases, with a person that had formerly been scrofulous. I examined the patient's chest, the summit of the lung gave out an obtuse sound. At the auscultation, was heard under the clavicle, a dead rattle, and under the sternum, creakings attended with mucous rattles. Copious purulent spitting, fever every evening, nocturnal perspiration, dyspnœa, eyes sunk in, circled with a blackish colour, extreme thinness, spitting of blood, and hemoptisy every month at the period of the menses, which had disappeared since ten months.

Bleeding, ioduret of iron, cod liver oil, decoction of lichen, sirup of ioduret of starch, extraction of peruvian bark, tar water, had been successively employed; blisters and even canteries had been applied to the chest, at last, the patient had undergone during a month a homœopathic treatment, without any amelioration.

After one month's treatment by galvanisation and medicamental inspirations, spitting became less frequent, respiration was performed with more facility; fever had decreased, the nights were good, so far that the patient thought herself already cured; but I undeceived her. A creaking noise was still heard in the lungs; a hoarse, hissing respiration and percussion; a dead sound in various points; the menses had not yet reappeared. The regimen consisted of milky pap and potato, fekula or tapioca, panadoes, chicken and veal broth, and new laid eggs.

At the close of the second month the courses reappeared;—from that period the improvement daily progressed sensibly: in four

months the cure was radical. I have since had an opportunity of seeing this person again, and always found her in perfect health.

REMARK FOURTH.

Viscount de G—— nine and twenty years of age, has since the age of 18 committed excesses of all sorts. His father died of tubercular consumption, his sister died of the same disease at 20. Viscount de G—— is tall, fair, of an evident lymphatic temperament. On being blamed for his excesses, he replied. "That he knew he must die young, of his father's and sister's illness, and that he preferred dying of any other disease than consumption." His mother had already remarked that since a few years he had been growing thin, and that when he had spent the night with his friends in drinking and smoking he had a dry cough, a precursory sign of the fatal disease; she would constantly say to him, "My dear son, you are killing yourself!"—"I know dear mother, replied he, that my days are numbered, I bear within me an hereditary defect that nothing can cure; let me enjoy peaceably the short time I have to live. Pleasure intoxicates me and then I no longer think of the cruel disorder, which from one moment to the other may destroy me."

That moment did not long delay its arrival. After a night of pleasure Viscount de G—— went to bed much fatigued; he had a fit of coughing and spit blood; then the blood flew of itself to his mouth without any effort of his to throw it out. Being deeply alarmed he sent for his family physician, who bled the patient, ordered an astringent potion, prescribed the same mode of treatment under the influence of which his father and sister had failed being cured.

Some persons spoke to Viscountess de G—— of our method and of our daily success. She consulted her physician upon it, who induced her not to follow the treatment of a doctor who was unknown

to her; he so adroitly dissuaded the wretched mother from calling us in, that she definitively procrastinated, and did not drop into the post-office the letter she had written us. The disease continued its progress and mischief.

There are unfortunately too many physicians, who unable to accomplish anything in certain diseases, are inclined to suppose that the bounds of their minds are the natural limit of science. Others imagine that if any remedy existed they must have discovered it, although they have taken neither the time nor the trouble to seek it. We should never end if we investigated the evident or secret motives of those who oppose every new doctrine.

We say to the honorable and learned physicians who doubt, "Why do you consider *a priori* as inefficient, every anticonsumptive remedy? Do you then look upon consumption as a sort of "*NOLI ME TANGERE*," a kind of sacred evil, a disease that it would be impious to cure?"

If such is not your idea, why forbid laborious men all research, and throw beforehand discredit on the result of their night-watches and labours? Who can imagine himself sufficiently elevated to reign alone over science?

If consumption could be cured of itself, or by a simple anodyne treatment, the advice of attempting nothing new would be perfectly understood. But daily experience superabundantly proves that consumption left to itself is ever fatal, that every treatment made use of hitherto, may have cured a few chronic catarrhs, some effusions, some bronchites, but never, or very seldom at least, pulmonary consumption. What have these medical men to be answerable for, who with folded arms, in the face of the despair of the family and the wretched victims, know the impotence of their own remedies, and yet attempt nothing new?

In a word! Viscount de G—— had reached the second stage of

the disease, with all its train of frightful symptoms, he vomited blood again. The Viscountess upbraiding herself for having listened to her physician, who was nearly powerless over this disorder, wrote to me ; she even requested the friend who had spoken to her about us to add a few words to her letter, and besought me pressinglly to come without one moments delay.

It nearly always thus happens, that when the disease is commencing and easily cured, it is neglected, it is deferred ; when the disorder becomes more alarming, one again hesitates to have it treated seriously, but when the evil which is already of several years' standing has reached its utmost limits, then the haste is great in proportion to previous neglect.

In spite of our good will, having other patients whom we could not quit, we could not set off to see Viscount de G—— till eight days after we had received the letter. We found him on our arrival in such a state, that we could not conceal from his mother the little hope we entertained. The young gentleman had had for a long time this impression on his mind,—he did not conceive a cure possible: he was in this respect in a very different disposition of mind from all consumptive persons, for one of the effects of the disease is to keep up in the patients the hope of cure, and they sometimes die with their heads replete with cheerful projects.

We made use of all the resources of our imagination to convince him of the superiority of our treatment, even in hereditary cases, an indispensable precaution to revive in him the desire of life that was dying away for want of hope, and which rendered him indifferent to every sort of treatment.

After two visits of one hour the patient took me by the hand, and said to me with tears in his eyes ; “I believe you, my dear doctor, it is God who sends you ; I promise to follow your treatment with religious punctuality.” He kept his word, the respirator

was applied, the treatment was followed with precise care, and the regimen observed.

In a fortnight his improvement was such that I could answer for a cure to his mother. Four months afterwards it was radical. The young gentleman gave up his habits of debauchery: he is now strong and robust.

REMARK FIFTH.

M. Le Jenne, jeweller at Annemasse, near Geneva, had been since several years subject to colds and catarrhs. About two years ago he had a serious pneumony. From that time he always had in the morning a little cough, oppression, &c. &c. About the end of October I was sent for; he had during the night vomited blood abundantly. It was the first time I saw the patient as a physician. When I arrived he was in the last extremity; the fever was intense, the dyspnæa extreme. The patient was every moment suffocating. The whole surface of the lungs gave out an obtuse sound; a dull rattle was heard under the clavicle on the left side. The patient complained of pain between the shoulders, and in various points of the chest; every fit of coughing brought on fresh vomiting of blood. This alarming state had become complicated by a retention of urine, obstinate constipation, and screeching headaches. After a fortnight's treatment, the more alarming symptoms were overcome; I then commenced the treatment by aspirations and galvanism. Under their influence the cough immediately got better, the fever ceased, the oppression decreased daily; spitting became less frequent, the lungs resumed their sonorousness; his appetite became craving, and in a few days the patient picked up flesh, announcing the rapid return of health. Two years have elapsed since then, and yet the man is doing well.

REMARK SIXTH.

M. Muller's son, residing at the Lake Club, Paquis, Geneva, had a cough, oppression, and a nearly complete loss of voice. A

dull sound was heard under the clavicle, and a slight crepitation at the summit of both lungs. After treating him according to our method, he was in a short time radically cured.

REMARK SEVENTH.

MM. Borle, residing at Grand-Pre (Petit-Saconnex), of a lymphatic temperament, was attacked by a very serious disease of the chest; the summit of the left lung gave out an obtuse sound; under the sternum were heard creakings attended with mucous rattle; the cough was intense, and the spitting copious. Having been treated by us, she is now radically cured.

The length of this pamphlet will not allow us to mention more cases; but we trust that sufficient has been said to prove the superiority of our method, and enlist the public in favor of the treatment we have discovered.

CONCLUSION.

A great many physicians, particularly those of the old school, pretend that with regard to pulmonary consumption there is nothing to be done, nothing to look for.

As to us, we have always thought that with every disease, God, in his infinite goodness, had created a specific substance proper for its cure, and that it is given to man to work out its discovery!

Have we not often seen patients given up by their physicians, cured by the agency of nature alone, or by a remedy indicated by a person quite a stranger to medicine? Why not then study with perseverance, the means which nature employs to operate her cures, and initiate us into her acts?

The studies we have made of our method, and the success obtained, has led us to believe that we have found the certain treatment of the tubercular disease.

We shall conclude by advising parents never to delay the treatment of their children, even in a preventive point of view, when they see the slightest signs of the fatal disease (which is now occupying us, appear; or when they have to fear some hereditary

defect, some constitutional predisposition; or even, when their children are only of a sickly complexion, they should make use of the medicamental inspirations and galvanism. To cure is excellent, but to prevent is preferable.

A double advantage attends our respirator: it may be worn during the cold season, as the common respirators of Markwick, Jeffrey, and others, without making use of medicamental inspirations.

NOTICE.

Dr. Bruc's medicamental respirator is a small apparatus that is applied to the mouth during the time fixed upon for aspirations.

It does not disturb the digestion and never fatigues. The air, as it passes through the tubes of the respirator, arrives at the lungs, sifted, less cold, and charged with the curative medicament.

Price of the medicated respirators No. 1 £3. 3s., and with the double quantity of medical aspirations No. 2 £5. 5s.

A printed paper on the manner of using it and the regimen to be followed in the various stages of the disease, accompanies the apparatus.

Principal House in London at Dr. de Bruc, 3, Coventry Street, Haymarket, where every information can be obtained, and at Messrs. MacDougal & Co., Chemists, 174, Regent Street, and by all respectable Chemists and Druggists in the Kingdom.

CAUTION.—Dr. H. de Bruc begs to assure the Public, that no medicated respirators are genuine, unless bearing his signature and seal, as here:



3, COVENTRY STREET, HAYMARKET, LONDON.



Accession no. ACK

Author Bruc, H. de

Consumption:
cured and ...

Call no. 3rd ed.

19th AC 310.5

cent Q 79
1858

Collect: A. C. 7. 1858

from: Grafton London

date: 1916-1933

